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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,201	12/19/2000	Theodore S. Hills	TAJ-0002	7649
7590 04/20/2004				
CANTOR COLBURN LLP 55 Griffin Road South Bloomfield, CT 06002			EXAMINER SHRADER, LAWRENCE J	
			ART UNIT 2124	PAPER NUMBER 7
DATE MAILED: 04/20/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,201

Applicant(s)

HILLS, THEODORE S.

Examiner

Lawrence Shrader

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 6-10; 16-20; 26-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5; 11-15; 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the Applicant's amendment filed on 2/02/2004.
2. Claims 1 – 5; 11 – 15; and 21 – 25 remain rejected. Claims 6 – 10; 16 – 20; and 26 – 30 have been cancelled as requested by the Applicant.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2; 11, 12; 21, and 22; are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al., U.S. Patent 6,356,913 (hereinafter referred to as Chu) in view of Lee, U.S. Patent 5,692,180, and further in view of Segnan, U.S. Patent 5,889,995.

In regard to claim 1:

“defining map container objects having keys...comprising strings conforming to requirements for identifiers;”
“using said keys of said map container objects as ordinary identifiers...;”

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4).

“declaring values of said keys as names qualified by said map container objects.”

See Chu Figure 4.

“using said map container objects as namespaces;”

Chu does not disclose using map container objects as namespaces. However, Lee discloses using map container objects as namespaces to organize the objects (column 2, lines 10 – 21). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, because the said combination allows the facilitation of a directory reference, as taught by Lee (column 2, lines 15 – 17), which provides for organization of objects representing uniquely identified names of resources.

“generating executable code to locate objects that are identified by said keys, wherein said executable code is executed after said compiling or interpreting said source code.”

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4), and Lee discloses that the map container objects are namespaces (column 2, lines 10 – 21), but neither Chu nor Lee teaches compiling or interpreting source code to generate executable code to locate an object. However, Segnan discloses a compiler to generate executable code from source code (column 5, line 65 – column 6, line 11) that identifies (locates) a method, which is an implementation of a class (object). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the Chu invention modified by Lee, to produce a map container that is searched for a key to be used as an identifier having the map container objects referenced to a name space, with the

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Segan invention having a compiler that produces executable code that locates an object, because this combination produces a compiler that performs the combined feature of searching a map container having a key that is used as an identifier, as taught by Chu, to generate an instruction that is referenced to a name space as taught by Lee.

In regard to claim 2, incorporating the rejection of claim 1:

"...said objects are in a file system."

Chu does not explicitly disclose the objects in a file system, however Lee does disclose the objects in a file system (See figure 3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee having the container objects in a file system, because the said combination allows the facilitation of a directory reference to organize the objects providing a means to access to stored objects in order to create, add, delete, and modify names and other information in the objects, as taught by Lee (column 4, lines 35 - 40).

In regard to claim 11 (a storage-medium corresponding to the method of claim 1):

Claim 11 is rejected for the same reasons put forth in the rejection of claim 1.

In regard to claim 12 (a storage-medium corresponding to the method of claim 2), incorporating the rejection of claim 11: Claim 12 is rejected for the same reasons put forth in the rejection of claim 2.

In regard to claim 21:

"defining map container objects having keys...comprising strings conforming to requirements for identifiers;"

“using said keys of said map container objects as ordinary identifiers...;”

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4).

“using said map container objects as namespaces;”

Chu does not disclose using map container objects as namespaces. However, Lee discloses using map container objects as namespaces (Column 2, lines 10 – 21). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, because the said combination allows the facilitation of a directory reference, as taught by Lee (column 2, lines 15 – 17), which uniquely identifies the names.

“declaring values of said keys as names qualified by said map container objects.”

See Chu Figure 4.

“generating executable code to locate objects that are identified by said keys, wherein said executable code is executed after said compiling or interpreting said source code.”

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4), and Lee discloses that the map container objects are namespaces (column 2, lines 10 – 21), but neither Chu nor Lee teaches compiling or interpreting source code to generate executable code to locate an object. However, Segnan discloses a compiler to generate executable code from source code (column 5, line 65 – column 6, line 11) that identifies a method, which is an implementation of a class (object). Therefore, it would have

been obvious to one skilled in the art at the time the invention was made to combine the Chu invention modified by Lee, to produce a map container that is searched for a key to be used as an identifier having the map container objects referenced to a name space, with the Segan invention having a compiler that produces executable code that locates an object, because this combination produces a compiler that performs the combined feature of searching a map container having a key that is used as an identifier, as taught by Chu, to generate an instruction that is referenced to a name space as taught by Lee.

The preamble of claim 21, *"A signal propagated over a propagation medium, the signal encoded with code...causing a computer to implement a method of compiling or interpreting a source code..."*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4), and Lee discloses that the map container objects are namespaces (column 2, lines 10 – 21), but neither Chu nor Lee teaches compiling or interpreting source code caused by a propagated signal. However, Segnan discloses a compiler to generate executable code from source code (column 5, line 65 – column 6, line 11) that searches a table for an assigned identifier. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the Chu invention modified by Lee, to produce a map container that is searched for a key to be used as an identifier having the map container objects referenced to a name space, with the Segan invention having a compiler search the a table for an identifier, because this combination produces a compiler that performs the combined feature of searching a map container having a key that is used as an identifier, as taught by Chu, to generate

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an instruction that is referenced to a name space as taught by Lee. Further, Lee additionally discloses propagation of data over a propagation medium (e.g., see Figures 1 and 2; column 3, lines 1 – 20). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the Chu invention wherein the map container is searched for a key to be used as an identifier with the Segan invention having a compiler search the a table for an identifier, and further modified with the propagation medium as taught by Lee, because this combination enables implementation on a distributed client-server system, as taught by Lee (column 3, lines 5 – 16), capable of downloading code with instructions to a compiler to implement searches of a map container having a key that is used as an identifier to generate an instruction that is referenced to a name space.

In regard to claim 22, incorporating the rejection of claim 21: It is rejected for the same reasons put forth in the rejection of claim 2.

5. Claims 3, 4; 13, 14; 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al., U.S. Patent 6,356,913 in view of Lee, U.S. Patent 5,692,180, and further in view of Allard et al., U.S. Patent 5,991,802 (hereinafter referred to as Allard).

In regard to claim 3, incorporating the rejection of claim 1:

“...said objects are identified by Uniform Resource Identifiers (URLs).”

Neither Chu nor Lee teaches that objects are identified by Uniform Resource Identifiers. However, Allard teaches that objects are identified by URLs (Abstract). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the

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teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, and further modified by the Allard teaching that objects are identified by URLs, because the URL identification allows the combination of Chen and Lee to communicate over a distributed system wherein server objects are invoked by a client system, as taught by Allard (Abstract)

In regard to claim 4, incorporating the rejection of claim 1:

“...said objects are identified by environment variables.”

Neither Chu nor Lee teaches that objects are identified by environment variables.

However, Allard teaches objects that are identified by environment variables (column 6, lines 25 – 30; column 11, lines 10 - 15). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, and further modified by the Allard teaching that objects are identified by environment variables, because the environmental variables provide parameters for a server to properly communicate with a client when an object is accessed, as taught by Allard (column 5, line 65 to column 6, line 5), thus allowing the combination of Chen and Lee to communicate over a distributed system.

In regard to claim 13 (a storage-medium corresponding to the method of claim 3), incorporating the rejection of claim 11: Claim 13 is rejected for the same reasons put forth in the rejection of claim 3.

In regard to claim 14 (a storage-medium corresponding to the method of claim 4), incorporating the rejection of claim 11: Claim 14 is rejected for the same reasons put forth in the rejection of claim 4.

In regard to claim 23, incorporating the rejection of claim 21: Claim 23 is rejected for the same reasons put forth in the rejection of claim 3.

In regard to claim 24, incorporating the rejection of claim 21: Claim 24 is rejected for the same reasons put forth in the rejection of claim 4.

6. Claims 5; 15; and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al., U.S. Patent 6,356,913 in view of Lee, U.S. Patent 5,692,180, and further in view of Klots et al., U.S. Patent 6,173,313 (hereinafter referred to as Klots).

In regard to claim 5, incorporating the rejection of claim 1:

"...said objects are identified by run-time name resolution schemes."

Neither Chu nor Lee teaches that objects are identified by environment variables.

However, Klots teaches objects that are identified by environment variables (column 1, lines 52 – 67). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, and further modified by the Klots teaching wherein objects are identified by name resolution schemes, because this modification allows an embedded object name in a URL to be recovered, as taught

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by Klots (column 1, lines 60 – 67), while providing a means for the combination of Chen and Lee to operate over a distributed system.

In regard to claim 15 (a storage-medium corresponding to the method of claim 5), incorporating the rejection of claim 11: Claim 15 is rejected for the same reasons put forth in the rejection of claim 5.

In regard to claim 25, incorporating the rejection of claim 21: Claim 25 is rejected for the same reasons put forth in the rejection of claim 5.

Response to Arguments

7. Applicant's arguments filed on 2/02/2004 have been fully considered but they are not persuasive.

The Applicant has argued:

The Applicant agrees with the Examiner that neither Chu nor Lee teach or suggest compiling or interpreting source code as set forth in the claims. The Examiner introduces Segnan as disclosing a compiler to generate executable code from source code that searches a table for an assigned identifier. However, Segnan does not teach that the executable code searches a table for an assigned identifier. All the searching is done by the compiler, not the generated code. The generated code uses pointers and unique identifiers (integers), and does no searching. It will be appreciated that all compilers generate executable code from source code, and all compilers search tables for identifiers. However, the claims recite "generating executable code to locate objects in said map container objects that are identified by said keys, wherein ***said executable code is executed after said compiling or interpreting*** said source code", emphasis added.

Accordingly, neither Chu, Lee, nor Segnan teach or suggest "generating executable code to locate objects in said map container objects that are identified by said keys, wherein said executable code is

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executed after said compiling or interpreting said source code". For these reasons, Applicant submits that claims 1, 11 and 21 patentably define over Chu et al. In view of Lee and Segnan. Claims 2 - 5, 12 - 15, and 22 - 25 all also patentable as depending from the aforementioned independent claims. In view of the foregoing, reconsideration and allowance of claims 1 - 5, 11 - 15, and 21 - 25 are respectfully requested.

Examiner's response:

In the remarks the Applicant recites the claim as:

"generating executable code to locate objects in said map container objects that are identified by said keys, wherein *said executable code is executed after said compiling or interpreting* said source code."

However, the claim actually reads:

"generating executable code to locate objects that are identified by said keys, wherein said executable code is executed after said compiling or interpreting said source code."

Thus, as written in the claim, there is no reference to executable code locating objects in a map container; the code is simply locating objects, a function that reads on the applied art. Furthermore, the key is not necessarily related to the generated code, and the key identifies objects as disclosed in Chu. Therefore, other than tending to make the "defining," "using," and "declaring" in the previous limitations "tangible, concrete, and useful," as required by 35 USC § 101, the added limitation to claims 1, 11, and 21 adds no distinguishable feature over the applied art.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Shrader whose telephone number is (703) 305-8046.

The examiner can normally be reached on M-F 08:00-16:30.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Lawrence Shrader
Examiner
Art unit 2124

April 15, 2004


KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100